

PCT/EP99/09732
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Docket No. H 3853 PCT/US

DISCUSSION

Applicants request that the amendments be entered in the specification. The amendments to the specification are of an editorial nature to enter headings suggested by the United States Patent and Trademark office and to correct obvious errors which occurred during preparation of the application. No new matter has been entered by way of amendment to the specification.

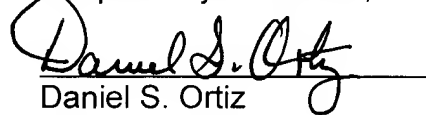
An annex entitled "Version With Markings To Show Changes Made" is provided showing the amendments made to the specification.

New claims have been entered in the application. The new claims are equivalent to the original claims with multiple dependencies and diminishing preferred ranges deleted.

Applicants respectfully submit that the claims are fully supported in the specification and claims as originally filed. No new matter has been entered by the new claims.

Favorable consideration of the application is respectfully requested. If any additional fees are due for entry and consideration of this amendment, please charge Deposit Account No. 01-1250.

Respectfully submitted,


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Attachment: Abstract (page 23)

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Version With Markings To Show Changes Made

On page 1, the title has been amended as follows:

[SHOCK-RESISTANT EPOXIDE RESIN COMPOSITIONS] IMPACT-RESISTANT
EPOXIDE RESIN COMPOSITIONS.

On page 9, lines 1 through 12 have been amended as follows:

mixtures thereof with oligomers of relatively high functionality (so-called crude MDI). Examples of suitable cycloaliphatic polyisocyanates are the hydrogenation products of the above-mentioned aromatic diisocyanates such as, for example, 4,4'-dicyclohexylmethane diisocyanate ($H_{12}MDI$), 1-isocyanatomethyl-3-isocyanato-1,5,5-trimethyl cyclohexane (isophorone diisocyanate, IPDI), cyclohexane-1,4-diisocyanate, hydrogenated xylylene diisocyanate (H_6XDI), m- or p-tetramethyl xylylene diisocyanate (m-TMXDI, p-TMXDI) and dimer fatty acid diisocyanate. Examples of aliphatic polyisocyanates are hexane-1,6-diisocyanate (HDI), 1,6-diisocyanato-2,2,4-trimethyl hexane, [1,6-diisocyanato-2,4,4-trimethyl hexane] butane-1,4-diisocyanate and 1,12-dodecane diisocyanate ($C_{12}DI$). The aliphatic, cycloaliphatic or even araliphatic diisocyanates are particularly preferred.

On page 15, lines 1 through 29 have been amended as follows:

adhesives are expected to meet in vehicle construction continue to increase because more and more structural elements - including those with load-bearing functions - are being joined by bonding processes. As already stated in the article by G. Lötting and S. Singh entitled: "Anforderungen an Klebstoffe für Strukturverbindungen im Karosseriebau" Adhesion 1988, No. 9, pages 19 to 26, the adhesives are expected on

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the one hand to [fulfil] fulfill production aspects of practical relevance, including automatable application in short cycle times, adhesion to oil-covered metal panels, adhesion to various types of metal panels and compatibility with the process conditions on the paint line (resistance to washing and phosphating baths, curability during stoving of the CED primer, resistance to the following painting and drying operations). In addition, modern structural adhesives have to exhibit improving strength and deformation properties, even in the cured state. These include the high corrosion resistance and flexural strength of the structural components and the deformability of the bond under mechanical stress. High deformability of the structural components guarantees a considerable safety advantage in the event of a crash. This crash behavior can best be determined by determining the impact energy for cured bonds; sufficiently high values for impact energy or impact/peel energy are desirable both at high temperatures of up to +90°C and in particular at low temperatures down to -40°C. High tensile shear strength should also be achieved. Both strengths should be achieved on a large number of substrates, mainly oil-covered metal panels, for example steel bodywork panels, steel plate galvanized by various methods, panels of various aluminium alloys or even magnesium alloys and steel plates coated by coil coating with organic coatings of the "Bonazinc" or "Granocoat" type. As shown in the following Examples, the adhesive compositions according to the invention surprisingly satisfy these requirements to a very high degree.

On page 20, line 1 has been amended as follows:

[CLAIMS] We claim: